

Mineral Industry Surveys

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BISMUTH IN THE THIRD QUARTER 2006

Total bismuth consumption in the United States for the third quarter of 2006 was estimated to be 496 metric tons (t), which was about 17% below that in the second quarter of 2006 and about 13% below that in the third quarter of 2005. The estimated consumption breakdown for bismuth in the third quarter was about 46% for metallurgical additives; about 34% for fusible alloys, solders, and ammunition; about 19% for chemical and pharmaceutical uses; and less than 1% for other uses (table 2). Bismuth imports for the third quarter were about 14% below those in the second quarter 2006.

The New York dealer price for bismuth, as published in Platts Metals Week, started the third quarter at \$4.15 to \$4.60 per pound and generally rose during the quarter to finish the quarter at \$4.60 to \$4.80 per pound.

Tiberon Minerals Ltd. (Toronto, Ontario, Canada) announced completion of the Nui Phao (northern Vietnam) project update

prepared by Ausenco Ltd. (Brisbane, Queensland, Australia) and the Nui Phao Mining Joint Venture Co. Ltd. Based on the project update, total capital costs to complete the project were expected to be \$303 million and production from the Nui Phao mine was anticipated to begin in early 2009. The mining plan anticipated annual production of 2,040 t of bismuth, along with substantial tonnages of tungsten trioxide, acid-grade fluorspar, copper, gold, and silver over a 16-year mine life (Tiberon Minerals Ltd., 2006).

Reference Cited

Tiberon Minerals Ltd., 2006, Tiberon reports of Q3 2006 financial and operating results: Toronto, Ontario, Canada, Tiberon Minerals Ltd. news release, November 20, 2 p.

TABLE 1
SALIENT BISMUTH STATISTICS¹
(Kilograms unless otherwise specified)

	2005	2006			
		First quarter	Second quarter	Third quarter	Year to date
Consumption	2,280,000	521,000	598,000	496,000	1,620,000
Exports ²	142,000	37,400	35,600 ^r	106,000	179,000
Imports for consumption	2,530,000	483,000	600,000 ^r	515,000	1,600,000
Price per pound, dealer, average of period	\$3.91	\$4.70	\$4.50	\$4.50	\$4.56
Stocks, end of period, consumer	134,000	129,000	118,000	129,000	XX

^rRevised. XX Not applicable.

¹Data are rounded to no more than three significant digits.

²Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

TABLE 2
ESTIMATED BISMUTH METAL CONSUMED IN THE UNITED STATES, BY USE¹
(Kilograms)

Use	2005	2006			
		First quarter	Second quarter	Third quarter	Year to date
Chemicals ²	500,000	83,500	95,700	95,700	275,000
Bismuth alloys	669,000	159,000 ^r	223,000	168,000	549,000
Metallurgical additives	1,090,000	270,000	270,000	230,000	770,000
Other	15,700	8,240	10,200	2,170	20,600
Total	2,280,000 ^r	521,000	598,000	496,000	1,620,000

^rRevised.

¹Data are rounded to no more than three significant digits, may not add totals shown.

²Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

TABLE 3
U.S. EXPORTS OF BISMUTH METAL, ALLOYS AND WASTE AND SCRAP, BY COUNTRY¹

(Kilograms, metal content)

Country	2005	2006					Year to date
		First quarter	Second quarter	July	August	September	
Argentina	240	15	--	9,380	--	--	9,400
Belgium	17,000	--	--	--	--	--	--
Brazil	4,260	20	--	--	--	--	20
Canada	70,100	19,800	17,600	3,020	4,440	10,300	55,100
Chile	1,560	916	--	--	--	--	916
China	35	--	--	--	--	--	--
Colombia	39	--	--	--	--	--	--
Dominican Republic	5,420	12,500	15,400	7,780	2,330	1,410	39,400
France	10,100	--	--	--	--	--	--
Germany	--	--	112	--	--	--	112
Hong Kong	234	--	--	979	3,630	1,100	5,710
India	2,000	22	--	--	142	--	164
Ireland	618	--	--	--	--	--	--
Israel	50	--	--	--	--	--	--
Japan	2,100	2,020	--	1,510	1,520	--	5,040
Korea, Republic of	293	159	100	--	--	--	259
Malaysia	11	--	--	--	--	--	--
Mexico	17,400	1,180	1,750	3,460	627	149	7,160
Saudi Arabia	--	50	--	--	--	--	50
Singapore	160	--	479	--	98	--	577
South Africa	98	--	--	--	--	--	--
Spain	1,000	--	115	--	--	--	115
Taiwan	49	--	--	--	--	--	--
Thailand	--	--	--	1,470	456	765	2,690
United Kingdom	8,840	728	--	--	--	--	728
Vietnam	--	--	--	--	20,800	30,400	51,200
Total	142,000	37,400	35,600	27,600	34,100	44,100	179,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL, BY COUNTRY¹

(Kilograms)

Country	2005	2006					Year to date
		First quarter	Second quarter	July	August	September	
Bahamas, The	2,620	527	553	--	--	--	1,080
Belgium	1,050,000	177,000	330,000	85,900	45,800	19,500	659,000
Canada	7,370	778	2,090	425	372	--	3,670
China	667,000	28,700	47,700	39,000	49,600	58,700	224,000
France	--	3	--	--	--	--	3
Germany	18,500	20	--	--	--	--	20
Hong Kong	--	36,500	--	33,600	4,540	--	74,600
Italy	106	300	--	--	--	--	300
Mexico	480,000	148,000	125,000	20,000	59,700	39,700	392,000
Netherlands	4	6	--	--	--	1,050	1,050
Spain	700	600	600	--	--	--	1,200
United Kingdom	304,000	90,600	94,000	10,900	31,000	14,900	241,000
Total	2,530,000	483,000	600,000	190,000	191,000	134,000	1,600,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.